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A REGISTER of METEOROLOGICAL OBSERVATIONS made at BOIS CHÊNE, near Port-au-Prince, Hayti. By Prof. A. Ackerman, National Museum.

(Read before the American Philosophical Society, July 15, 1870.)

INTRODUCTORY REMARKS.

All the meteorological observations have been made at "Bois Chêne," S.E. from the harbor of the Capital, at an elevation of 52 meters above the mean level of the sea, with the exclusion of those comprised between the 19th May, 1866, to the 17th November, 1867, which have been made at "Lalue," suburb E of the Capital, country seat of General Lamothe, elevation 57 meters*

The rain-guage used is that of Babinet; its surface of reception is four square-decimeters, so that a centilitre of water represents $\frac{1}{4}$ millimeter of rain in elevation. No building, trees or other obstacles influenced the quantity of received rain, and in order to avoid a correction for evaporation, the water was measured after every rain, except what fell at night, which was registered before sunrise, and without having applied a correction. Elevation of the funnel above ground 3 feet.

The diurnal rain comprises that which fell between 6 o clock A. M. and 6 o'clock P. M., and nocturnal rain that which was received in the remaining twelve hours.

As to the division adopted for the electric phenomena of the atmosphere, the first column reproduces the number of days during which it thundered, and lightning was perceived; however, one phenomenon may have been independent of the other, for example: the thunder was heard in the morning, and the lightning seen in the evening of the same day; this day is noted in the first column. In order to diminish a sort of want of precision in this first column, the last column represents the days of "orages" which passed above town or its near environs, notwithstanding they have already been counted in the first column. The number of days during which thunder alone was heard, or lightning only perceived, form the successive columns and can only be considered as minima, for the phenomena may have escaped observation, principally lightning at night.

There are days during which thundering lasts for hours, and others when lightnings are so numerous in the evenings as to amount from 30 to 80 in a minute of time, and so for several hours. Particulars about lightnings, on colors, numbers, bifurcations, multiple divisions, distances ascending and descending, &c., &c., have been published in the Moniteur Officiel of the Republic.

Relative to temperature, the thermometers are standard instruments, from the best makers in Paris, divided on the stem into $\frac{1}{3}$ centigrades, so that a tenth of a degree is easily estimated; from time to time the variation of zero-point was verified and the correction applied to the observations.

^{* &}quot;Lalue" and "Bois Chêne" are situated about a mile from the sea shore, and both stations near together, about $\frac{1}{2}$ part of a mile asunder.

[†] Thunder storm and rain.

The instruments have no frame, and are freely suspended without being shaken by the wind. The absolute minimum is given by a Rutherford spirit therm., and the absolute maximum by Negretti & Zambra's mercurial therm., both Salleron's construction at Paris.

The hourly observations of temperature are performed by "Breguet's thermometrographe horaire No. 6," [See Arago, not. scientif. vol. V, pp. 628-632, and Desains: physique, vol. I, page 247; or Daguin: phys. vol. II, page 546, etc.] This instrument having an arbitrary scale, it was compared with a standard therm. in two constant temperatures, and further checked by numerous simultaneous observations. Breguet's No. 6 acts in the most satisfactory manner, but is much more sensible than other thermometers, so that for the comparisons the instruments were read at a distance with the aid of a cathetometer, and further all the cares taken to obtain correctness, etc.

The exposure of all the instruments is as follows:

A square room of 14 feet a side, has openings towards the four cardinal points, a covered gallery on the South side, is without ceiling, covered with shingles, so that the air circulates freely day or night, from whatever direction the wind is blowing.

On the North side is the window furnished with latticed blinds, painted white, nearly of the same form as prescribed in the "Directions for meteorol. observ." Smithsonian Institution 1860, fig. 2. Elevation of thermometers above ground 10 feet.

The mean daily temperature (and consequently the mean monthly and annual) are the results of the 24 registered hourly observations. The given factor is the co-efficient by which the difference between the absolute maximum and minimum is to be multiplied, and the product added to the minimum, in order to obtain the same mean daily temperature as given by Breguet's hourly thermometrograph.

About ten personal observ. were made daily, with free thermom, psychrom, barometer, winds, clouds, &c., &c., besides the reading of the maxim and minim and the said thermometrograph, thermometer exposed to the sun, to nocturnal radiation, etc.

The second decimal of Fahrenheit degrees does not occur in observation, and is either the result of the mean addition or produced by the reduction of Centigrades into Fahrenheit degrees.

The barometers, Fortin's, had been compared with the barometer at the astron. observatory in Paris, and the makers had given the correction, a constant, for every one. Further, the observations were corrected for capillarity, the column reduced to the temperature of zero degree (32° Fahrenheit) and reduced to the mean level of the sea by the formula of Jamin, Cours de physique de l'école polytechnique, vol. I, end of page 263.

$$X=18405^m~(1+0.002552.~cos~2~L)$$
 $\left[1+\frac{2~(T+t)}{1000}\right]\log\frac{H}{h}$; H&h being reduced to 0° C. X being known the value of H gave the pressure on the level of the sea.

Meteorological Station of Port au Prince.

Extracted from the Registers.

I. RAIN AND ELECTRICAL PHENOMENA.

	Rain ex	epressed	in millim.	١	umber of da	ys of obs	erved.	thun ov tov	mber of derstorms er the vn or its
1863.	total.	diurnal	nocturnal	rainy.	thunder & lightning.	thund'r alone.	lightn'g alone,		virons. nocturnal
Aug. Sept. Oct. Nov. Dec.	82.50 128.00 257.00 91.50 18.50	16.25 85.00 27.25	35.00 111.75 172.00 64.25 18.50	23 13	17 2 1 1 0	0 0 0 0	0 2 1 1 0	$\begin{bmatrix} 1\\3\\1\\1\\0 \end{bmatrix}$	1 2 1 1 0
1864.	577.50	176.00	401.50	72	22	0	4	6	5
Jan. Feb. March. April. May. June. July. Aug. Sept. Oct. Nov. Dec.	0.75 123.75 110.75 212.00 260.75 59.50 108.75 223.50 164.25 170.75 61.00 45.50	15.50 0.00 0.00 133.00 1.50 45.25 152.50 11.50	0.75 108.25 110.75 212.00 127.75 58.00 63.50 71.00 152.75 122.75 44.00 35.00	7 14 19 13 13	0 3 0 2 5 5 5 8 15 20 1 2 2	0 1 0 1 1 8 6 1 2 1 0 0	0 2 0 2 1 0 0 0 0 0	0 0 0 2 1 2 3 6 9 0 2	0 0 0 2 1 1 2 5 1 0 2 1
1865.	1541.25	434.75	1106.50	145	63	21	5	26	15
Jan. Feb. March. April. May. June. July. Aug. Sept. Oct. Nov. Dec.	20.40 13.00 77.75 193.50 451.25 74.75 103.00 129.00 298.25 151.50 158.50 28.00	0.00 8.00 157.75 44.25 38.00 54.00 131.75 46.25 14.50	16.40 13.00 77.75 185.50 293.50 30.50 65.00 75.00 166.50 105.25 144.00 28.00	14 10 15 20 22 9	0 0 0 2 17 8 7 9 11 13 4 0	0 0 1 4 8 2 3 8 3 2 1	0 0 0 0 0 1 0 1 1 1 1 4	0 0 0 0 4 3 4 3 3 3 1	0 0 0 0 2 3 3 1 1 2 1 0
	1698.90	498.50	1200.40	157	71	32	9	21	13

II. RAIN AND ELECTRICAL PHENOMENA.—Continued.

1866.	Rain ex	kpressed	in millim.	١,	ımber of day	s of obs	erved.	thun	mber of derstorms ver the vn or its virons.
1000	total.	diurnal	nocturnal	rainy.	thunder & lightning.	thund'r alone.	lightn'g alone.	total.	nocturnal
Jan. Feb. March. April. May. June. July. Aug. Sept. Oct. Nov. Dec.	57.25 75.50 149.25 362.25 226.50 146.00 125.50 131.50 110.00 125.50 56.25	5.00 inappr. 57.00 27.25 96.50 8.75 37.50 39.00	46.25 63.50 144.25 362.25 169.50 118.75 54.00 116.75 94.00 71.00 42.25 56.25	9 12 11 22 18 17 15 18 20 20 11 6	2 2 0 8 13 13 13 16 20 7 1	1 2 0 2 1 8 10 4 0 0	0 1 0 1 1 1 1 0 3 1 0	2 1 0 3 7 3 6 7 6 4 0	2 1 0 2 5 3 2 7 5 4 0
1867.	1716.00	377.25	1338.75	179	95	35	10	39	31
Jan. Feb. March. April. May. June. July. Aug. Sept. Oct. Nov. Dec.	51.25 26.75 22.75 199.50 322.75 177.00 54.25 138-75 52.75 126.75 63.25 41.50	5.00 2.00 14.75 60.00 28.25 41.50 47.25 28.25 3.75 19.50 0.00		4 9 5 13 17 17 17 9 15 7 12 15 3	0 2 1 6 13 11 13 15 14 17 7	0 0 1 0 2 7 1 8 1 3 2 0	0 0 1 0 2 0 4 0 6 1 3 1	0 1 0 0 5 2 2 2 2 2 0	0 0 0 0 3 1 1 0 4 2 2 1
1868.	1277.25	250.25	1027.00	119	99	25	18	20	13
Jan. Feb. March. April. May. June. July. Aug. Sept. Oct. Nov. Dec.	0.50 143.25 86.75 102.00 317.50 52.00 42.75 129.50 282.00 118.00 117.75 43.00	1.25 10.00 47.00 115.00 47.75 14.00 43.50 151.00 13.75 29.00	0.25 142.00 76.75 55.00 202.50 4.25 28.75 86.00 131.00 104.25 88.75 23.00	14 17	0 7 1 4 17 6 14 18 21 10 8 0	0 0 0 0 4 10 2 3 4 5	1 3 0 0 1 0 12 5 0 3 2	0 1 0 6 1 5 7 16 1 3	0 1 0 0 5 1 2 6 12 1 2 0
	1435.00	492.50	942.50	179	106	29	28	40	30

III. RAIN AND ELECTRICAL PHENOMENA-Continued.

1869.	Rain exp	pressed i	n millim.		Number of d	lays of o	bserved.	stor the	mber of nunder- ms over town or	
	total.	diurnal	nocturnal.	rainy	thunder & lightning.		lightn'g alone.	ľ	environs. nocturnal	
Jan. Feb. March. April. May. June. July. Aug. Sept. Oct. Nov. Dec.	26.75 141.00 108.75 123.25 326.25 139.25 97.50 265.50 267.25 151.50 28.75 6.00	7.50 5.50 inap. 105.00 64.50 48.50 158.25 31.25 25.00 6.00	133,50 103.25 123.25 221.25 74.75 49.00 107.25 236.00 126.50 22.75	12 14 17 18 12 16 22 22 22 18	1 2 1 5 15 18 21 21 19 17 4	0 0 1 1 3 4 5 7 5 4	0 1 0 0 0 1 0 0 2 4 3	0 1 1 0 7 9 8 10 7 6 0 0	0 1 1 0 5 4 1 3 6 6 0 0	
	1681.45	467.50	1214.25	170	124	31	12	48	27	
					a	b	<u>c</u>			Days of electric phenom. a + b + c.
1964 1865 1866 1867 1868 1869	1541.25 1698.90 1716.00 1277.25 1435.00 1681.45	498.50 377.25 250.25 492.50	1200.40 1338.75 1027.00 942.50	157 179 119 179	63 71 95 99 106 124	21 32 35 25 29 31	5 9 10 18 28 12	26 21 39 20 40 48	15 13 31 13 30 27	89 112 140 142 163 167

The remarkable increase of days of electric phenomena is not yet accounted for. Nothing has been changed in the mode of observing, or hours of observing, and all are personal observations. I may add, that for the last four years agriculture has been neglected in the mountains surrounding the town.

		Mea	an value o	f a rainy	day in mi	llim.	
	1863.	1864.	1865.	1866.	1867.	1868.	1869.
January. February, March, April, May, June, July, August, September, October, November, December.	6.35 7.53 11.17 7.00 3.08	0.37 8.35 10.07 14.13 15.34 8.50 7.77 11.76 12.63 13.13 4.70 6.50	4.08 2.60 6.48 10.08 18.80 5.34 10.30 8.60 14.90 6.90 17.60 14.00	6.36 6.30 13.57 16.47 12.58 8.56 10.03 6.97 6.57 5.50 11.40 9.25	12.81 2.98 4.55 15.35 18.98 10.41 6.03 9.25 7.53 10.56 4.21 13.83	0.25 8.43 5.78 6.80 12.70 3.71 3.29 9.96 11.75 8.43 6.93 4.30	2.97 11.75 7.77 7.25 18.12 11.60 6.10 12.06 12.15 8.42 4.11 2.00

THE MOST RAINY DAY OF EVERY MONTH SINCE THE 1ST OF AUGUST, 1863.

		18	1863.			32	1864.			1 2	1865.	
	Date.	Diurnal or not.	Diurnal Duration or not.	Millim.	Date.	Diurnal or not.	Diurnal Duration or not.	Millim.	Date.	Diurnal or not.	Diurnal Duration or not.	Millim.
January,					31			0.75	12	u		7.00
February,					25	u		27.00	4	п		9.00
March,					16	u		58.00	73	а		24.00
April,					20	п	130 min.	58.00	83	п		40.00
May,					4	п		62.00	25	d and n	d and n 24 hours.	142.00
June,					88	ц		43.00	20	d and n		22.00
July,					16	п		30.00	6	п		33.00
August,	ec	ъ	32 min.	32.00	22	п		46.75	15	a		36.00
September,	18	u		37.75	က	п		35.00	42	п		80.00
October,	12	п		38.00	4	g	4 hours.	62.00	27	п		42.25
November,	7	п		17.50	32	р		13.50	21	d and n		59.25
December,	8	u		8.00	83	u —		17.50	1	n		28.00

THE MOST RAINY DAY OF EVERY MONTH SINCE THE 1ST OF AUGUST, 1863-Continued.

			1866.			18	1867.			18	1868.			1869.	.66	
	Date.		Diurn'l Duration Millim.	Millim.	Date.	Diurn'l or not.	Diurn'l Duration Millim.	Millim.	Date.	Diurn'l or not.	Diurn'l Durat'n Millim or not.	Millim.	Date.	Diurn'l or not.	Diurn'l Durat'n Millim. or not.	Millim.
January,	17	l a		17.25	1	u		34.75	19	q	1	0.25	83	p		1.50
February,	83	п	30 min.	23.75	6	п		12.00	26	п	135 min.	38.00	83	E		67.00
March,	31	п		36.75	14	п		15.00	13	п	45 min.	15.00	17	п		44.75
April,	-	ц	105 min.	28.00	83	п		58.00	11	п	105 min.	36.00	6	g		60.00
May,	17	п		56.50	6	п		73.50	17	п	120 min.	57.00	6	ф&п		134.00
June,	12	п		65.50	6	п		72.50	6	р	55 min.	13.00	23	р		*60.00
July,	12	д&п	4 h. 30 m.	48.00	4	d & n		31.50	က	п		11.00	23	E .		20.00
August,	30	ď	2 h.	23.25	23	п		33.25	क्ष	п	55 min.	47.00	19	д & п		34.00
September,	67	п	1 h.	26.00	7	ъ		19.25	17	р	120 min.	64.00	13	п		72.00
October,	31	u —		21.75	9	ű		33.75	18	п		61.25	œ	п		52.00
November,	25	р	3 h. 30	86.75	10	р	135 min.	16.00	_	d & n	90 min.	35.75	12	E		14.75
December,	22	"	2 h. 30	22.00	15	- E		22.25	18	P		10.50	67	ı.	- marking	4.00
													*	* Rain and hailstones.	illstones.	

TEMPERATURE.

	-	Extreme amplit'd.	. 228885 528825 528885		° 888748848888 8888848888888888
	,	amplit'd.	0 17.454 15.38 15.38 18.00		0.021289 0.0212828282 0.0212932 0.022888 0.0228
	1	nignest maxim.	88.84 88.84 88.84 88.84 88.84		0.000 0.000
1865.	1	ninim.	。 5.58.53 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.52 5.58.53 5.58	1867.	59.0 64.78 67.70.16 69.88 69.88 69.88 61.88 61.88
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			Jan. Feb. March. April. June. June. Juny. Aug. Sept. Oct.		Jan. Feb. Meb. April. May. June. July. Aug. Sept. Oct.

TEMPERATURE—Continued.

1		131	1868.							1869.			
Mean	Monthly mean	mean	Lowest	Highest	Моэп	Fyfrema	Moon	Month	Monthly mean	Lower	Limbost	Moon	Evtnomo
monthly.	of minim.	of maxim.	minim.		amplit'd. amplit'd.	amplit'd.	monthly.	of minim.	of maxim.	minim.	maxim.		
76.46 75.92 76.43	64.94 66.56 67.64	88.70 87.26 86.36	56.48 62.24 62.60	93.20 92.30 91.40	23.76 20.70 18.72	36.72 30.06 28.80	76.60 77.58 77.27	68.38 69.28 69.28	88.52 88.11 86.72	59.36 63.50 64.22	92.84 92.84 92.30	22.14 20.11 17.44	29.32 29.34 28.08
£833	68.18 (8.36 71.78	90.32 89.96 92.48	65.30 67.10 68.72	8.88 4.10 4.06 8.06	22.22 20.23 20.24	31.12 27.06 32.34 34.05	81.89 82.69 40	70.77 71.69 72.14	90.21 93.38	66.38 66.74 67.46	95.54 97.70 98.24	19.44 21.24 21.24	30.96 30.96 78
% 25	75.77 73.22 71.24	85.38 96.88 96.08	70.34 68.72 67.64	100.9 100.4 4.64 10.45	19.62 21.60 17.82	27.06 27.00	81.54 80.61 80.96	 2525 3628	8.88 4.68 4.88	67.82 67.82 69.62	8888 820 720 720	21.89 18.93 17.92	88.2 28.2 28.21
828	69.26 68.90 66.74	88.34 86.72 87.26	69.26 61.52 61.70	92.30 91.40 90.86	19.08 17.82 20.52	29.88 29.88 29.16	80.06 78.19 75.52	71.55 69.46 65.87	888.07 27.33 33.04 34.04	66.72 60.72 74.04	222 344	17.08 18.61 21.46	30.58 30.98
(EA	N Mon	гицх Т	EMPER.	MEAN MONTHLY TEMPER, OF 6 YEARS.	SARS.			W	MEAN ANNUAL TEMPERATURE.	UAL TER	TPERAT	JE.E.	
		. 747.77 7.75.22 7.75.22 7.75.23 81.30 81.30 81.30 81.30 81.30					1864 1865 1866 1866 1867 1868			78.57 78.94 78.94 78.80 79.52			
		75.90 77.38 79.90					W.	ean annua	Mean annual of 6 years,	78.82			

THE LOWEST AND HIGHEST MEAN DAILY TEMPERATURE FOR EVERY MONTH.

	18	1864.	8 2	1865.	18	1866.	18	1867.	31	1868.	18	1869.
	lowest.	highest.	lowest.	highest.	lowest.	highest.	lowest.	highest.	lowest.	highest.	lowest.	highest.
January,	73.22	78.44	73.40	80.51	69.44	78.98	72.55	78.17	73.04	79.66	72.36	78.84
February,	72.14	77.90	11.60	78.44	72.23	79.25	74.01	78.44	72.91	79.11	75.36	80.26
March,	73.40	79.70	76.64	80.24	68.54	78.26	75.99	80.76	71.42	79.88	73.45	79.75
April,	75.92	80.42	74.66	80.06	74.12	80.06	77.72	81.67	75.43	84.06	78.16	84.11
May,	73.40	80.42	75.56	83.39	75.56	81.50	76.24	81.05	76.82	81.05	74.70	86.07
June,	77.99	84.99	79.88	85.10	77.90	82.76	76.86	85.59	75.22	85.59	78.63	85.35
July,	78.15	85.32	77.99	84.65	78.08	83.66	78.04	85.95	78.08	86.11	78.06	85.57
August,	77.63	85.10	78.62	86.18	78.08	84.65	74.17	84.92	79.70	86.77	77.88	83.53
September,	78.62	84.11	75-11	81.41	76.82	83.51	76.01	84.20	75.94	81.39	79.26	83.21
Obtober,	74.39	81.86	77.18	81,23	77.02	81.50	78.26	84.38	75.83	82.96	77.76	81.64
November,	74.07	80.45	75.74	79.70	74.06	79.50	73.74	80.92	72.09	79.75	75.88	79.77
December,	72.65	78.35	73.94	80.06	71.06	78.33	71.78	79.88	73.40	77.93	72.63	77.99

MEAN MONTHLY TEMPERATURES FOR EVERY HOUR-YEAR 1868.

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48	**************************************	5.84
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-d &	25.35 25.35 25.35 27.25	7.45
4r	76.46 4.77.00 7.77.00 7.77.00 7.70.28 88.25 88.25 7.70.28 7.70.28 7.70.28 7.70.28	8.75.7
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483	828.85.95.95.85.85.85.85.85.85.85.85.85.85.85.85.85	85.41
18h	0.83.88.88.89.22.23.88.89.89.89.89.89.89.89.89.89.89.89.89.	83.49
42	24.777.00 25.777.00 25.777.00 25.777.00 27.777.00 27.777.00 27.777.00 27.777.00 27.777.00 27.777.00 27.777.00 27.777.00 27.777.00 27.777.00	80.74
48	0.000	77.44
19 19	68.36 68.36 68.36 68.36 69.37 69.08 69.08	73.07
18 18	0.50 0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.7	
17 17	66.65. 68.18. 68.18. 69.62. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82. 69.82.	1.75
491 192	68.00 68.00 68.00 7.00 7.00 7.00 7.00 7.00 7.00 7.00	2.29
	68.72 171.06 171.06 171.06 171.09 171	$\frac{2.81}{7}$
4.4 P	69.69 69.69 71.72.77 72.69 72.60 72.60 72.60 72.60 72.60 72.60 72.60 72.60 72.60 72.60 72.60 72.60 72.60 72.60 72.	3.58 7
1333	- 55%%###55%%% I	[°.]
tagin		.76 74
-pim	<u>。 </u>	74,
	, fi fi	
	tary, ruary ch, l, l, l, l, lost wat ust, embe ber, smbe	
	Januar, Februa, April, May, June, July, Septem October Noveml	

UNUSUAL DAYS. TEMPERATURE OF DAYS ENTIRELY RAINY.

38 72,32	.96 72.14	74 75.74
72.6	5071.9	75.7
_72°	72.50	75.38
72.68	72.50	75.20
40 73.04 72.68 72.68 72.	72.68	74.30 74.30 74.66 75.20 75.3
73.04	73.04	74.30
0.7	72.68 73	74.30
3.76	3.40	6.28
767	.12.7	.68
34 73	18 74	16.76
73.5	174.	3 76.
-73°	75.7	76.4
73,76	78.08	75.02
4.84 75.20 75.56 76.28 76.64 74.48 77.94 73.94 74.30 73.76 73.76 73.94 73.94 73.76 73.76	4.30 73.22 75.20 77.00 77.36 78.98 78.08 75.74 74.48 74.12 73.40 72	5.20 75.20 75.02 74.30 73.36 74.48 74.66 75.38 74.12 74.48 75.02 76.46 76.46 76.68 76.28 74
4.30	7.36	4 12
_54.	8	.38
94 73	2077	99
06:7	2 75.	8 74.
74.4	73.2	74.4
76.64	74.30	73.36
76.28	75.92	74.30
5.56	1.86	5.02
5.20 7	89	5.20
.84	14.8	20 7
30 74	32 81	56 75
0740	6.81.	6.75.
743	80.0	75.5
75.02	81.50	75.20
. August 27.	September 10.	. June 4.
1867	:	186

MEAN MONTHLY FACTORS FOR OBTAINING THE MEAN DAILY TEMPERATURE WITH THE ABSOLUTE

MAXIM. AND MINIM. ONLY.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1865 1866 1867 1868 1869	0.5322 0.4803 0.4496 0.4790 0.4626	0.4452 0.4782 0.4706 0.4562 0.4778	0.4019 0.5026 0.4580 0.4667 0.4775	0.4586 0.4473 0.4476 0.4446 0.5753	0.4698 0.4510 0.4545 0.4829 0.5516	0.4645 0.4440 0.4265 0.4620 0.4832	0.4790 0.4404 0.4356 0.4138 0.4503	0.4792 0.4580 0.4180 0.4410 0.4749	0.4322 0.4451 0.4363 0.4173 0.5013	0.4272 0.4064 0.4775 0.4933 0.4878	0.4429 0.4366 0.4415 0.4549 0.4651	0.4797 0.4241 0.4627 0.4341 0.5141	0.4794 0.4520 0.4482 0.4538 0.4925
Mean of 5 years.	0.4807	0.4656	0.4611	0.4747	0.4840	0.4560	0.4438	0.4542	0.4464	0.4584	0.4482	0.4629	0.4613

The above factors have been calculated for every day in the year, and the mean taken for every month.

If the absolute daily maxim. and minim are taken only, their half-sum will not represent the true mean daily temperature. The following wellknown formula will represent it: $(Max-Min) \times f + min. = mean daily.$ Breguet's instrument having given the mean daily temperature by 24 equidistant observations, and the absolute maxim. and minim. having also been observed, the factor f was obtained by the formula.

$$f = \frac{\text{(mean-min.)}}{\text{(maxim.-min.)}}$$

Highest temperature observed since 1859. 100,40 on the 15th August, 1868, between 0 and 1. Lowest do do do 56.48 on the 28th Jan. 1868, at 6 o clock, A. M.

Greatest difference observed between free temperature and exposed to sun, 22° 32.

Highest temperature exposed to the sun observed, 115°16, 1886, August 1st., the free temperature being 94°64, at the same time a thermometer with ivory scale, lying on a piece of board, marked 120°.

Greatest difference observed between free temperature and exposed to radiation at night, 10° 45.

MEAN ATMOSPHERIC PRESSURE AT NOON, DEDUCED FROM EVERY DAY'S OBSERVATIONS MADE AT NOON, AND REDUCED AS STATED IN THE INTRODUCTORY REMARKS.

						n.m. m.m.	10.50 m.m. 13.94 m.m.	l in 1866,	sillation, s occurred	etrical Osc n five year	Mean Annual Barometrical Oscillation, Greatest oscillation in five years occurred in 1866,	fean Anni Freatest os	A 0
762.77	763.19	761.89	160.70	761.90	762.32	763.31	762.93	762.10	763.28	763.94	764.12	763.83	Mean of 5 yrs.
2.24 83.83	2.43	1.59	1.40	1.95	2.84	3.24 3.70	3.58 3.58	2.58	9.53 9.53	3.62 4.28	3.75	4.12 3.31	i
762.48 2.89 2.69	763.06 3.10 3.54	761.19 1.41 2.47	760.36 0.03 0.83	761.14 2.32 2.02	761.72 2.35 2.06	763.33 3.20 3.07	762.82 3.25 2.04	761.70 2.09 1.75	762.90 3.41 2.76	764.09 4.39 3.32	764.33 4.74 4.31	763.19 4.39 4.14	1
Mean Annual at Noon.	Dec.	Nov.	Oct.	Sept.	Aug.	July.	June.	May.	April.	Mar.	Feb.	Jan.	

Mean Daily Variation, 1867, 1866, 1865, for every month compared with Noon, in Millimeters.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Max. of A. M.	+ 1.47	+ 1.47 + 1.46	+ 1.28 $ + 1.06$		+ 0.90	+ 0.90 + 0.87	+ 0.75	+ 0.75 + 1.00	+ 1.08 + 1.30	+ 1,30	+ 1.34 + 1.53	+ 1.53
Minim, of P. M.	- 1.49	9 - 1.60	-1.52	- 1.46	- 1.33	- 1.19	- 1.04 - 1.09	- 1.09	- 1.13	- 1.09	- 1.12	- 1.15
Mean Daily Ampl.	2.96	3.06	2.80	2.52	2.23	2.06	1,79	2.09	2.21	2.39	2.46	2.68

MONTHLY AMPLITUDE OF ATMOSPHERIC PRESSURE.

	Highest stand of Barometer.			Lowest stand of Barometer.					im. thly tude.	Remarks.		
	date.	hour.		mil me ter	li- }- :.	date.		nour.	mi m te	e-	millim. monthly amplitude	Remarks.
April. May. June. July. Aug.	23 13 21 5 28 7	91/2 10 9 9 91/2 91/2	" " " P M		33 70 00 83 75 70 75	20 24 26 23 19 5	3 5 4 4 4 3 4	PM	760 760 758 757 760 761 755	.15 .30 .91 .33 .40 .07	8.09 7.50 4.35 • 4.63 4.90	
Sept. Oct. Nov. Dec.	20	10 h		764. 763. 763. 766.	39 85	10^2	5 4½ 4 4		758 758 758 759	.00 .19	5.34 5.39 5.66 7.03	
1866.							•		100	.00	11.00	
Jan. Feb. Mar.²	12 17 12	9	A.M	769. 768. 767,	80	11		PM	760 761 762	.28	8 32 7.52 5.03	tween 1863 to 1870.
April.	1	9	••	765.	10	18	41/4	"	760	.98	3.92	³ On some days the max.A M unobserved
May.	6	91/2	"	764.	36	25	41/4		758	81	5.55	4Same remark.
June. July. Aug.	21	10	"	764. 765. 764.	071	3	$\frac{3\frac{1}{2}}{3\frac{3}{4}}$	"	760 760 758	.49 .56	4.30 4.53 6.27	⁵ Same rema. k.
Sept, Oct. Nov. Dec.	14		"	764. 762 763.	65	30 7 6	11/4 41/4 33/4	"	755 757 757	$\frac{16}{.95}$	9.67 4.70 6.25	^o The lowest stand between 1863 to 1870. Great hurricane U. S. coast.
1867.		h					1	,				
Jan. Feb. March. April. May. July. Aug. Sept. Oct. Nov. ⁷ Dec.	$\begin{bmatrix} 28 \\ 1 \\ 5 \\ 14 \\ 12 \\ 28 \\ 6 \\ 11 \\ 30 \\ 1 \\ 5 \\ 21 \\ \end{bmatrix}$	834 7 91/2 91/2 10 9 61/2 71/2 73/4	4. M	768 767. 766. 765. 765. 765. 764. 764. 766. 766.	00 54 33 86 34 75 81 62	15 22 22 8 9 30 3 7 14	3 4½ 4 4 4 4 634 3 4 14 3 14 3 14	P.M.	758 760 759 758 758 758 759 759 757 760 760	.50 .85 .47 .60 .50 .38 .64 .82 .47	9.32 6.50 6.20 6.07 4.73 7.36 5.96 5.11 3.99 7.15 6.23 5.65	⁷ From 23 to 28 Nov. no barom. observat.

Certif. ten pages to be conform to the registers of the Meteorological Station of Portau-Prince.

Prof. A. Ackerman.